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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,954	12/08/2003	Francois Cottard	06028.0035-00	9017

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EXAMINER

ELHILO, EISA B

ART UNIT	PAPER NUMBER
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1751

MAIL DATE	DELIVERY MODE
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07/03/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/728,954

Applicant(s)

COTTARD ET AL.

Examiner

Eisa B. Elhilo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24, 43-47, 56, 57 and 60-102 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24, 43-47, 56-57 and 60-102 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1 This action is responsive to the amendment filed on June 27, 2007.

2 A request for continued examination under 37 CFR 1.114, including the fee set forth in
37 CFR 1.17(e), was filed in this application after final rejection. Since this application is
eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e)
has been timely paid, the finality of the previous Office action has been withdrawn pursuant to
37 CFR 1.114. Applicant's submission filed on 6/22/2007 has been entered.

Claim Rejections - 35 USC § 103

3 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all
obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 43-44, 56-57 and 60-102 are rejected under 35 U.S.C. 103(a) as being
unpatentable over Cottard et al. (US 2001/0023515 A1).

Cottard et al. (US' 515 A1) teaches a composition for dyeing hair comprising oxidation
dyes (see page 1, paragraph, 0013), cationic polymers of hydroxyethylcelluloses (QUATRISOFT
LM 200) modified by at least one fatty chain (associative polymers) as claimed in claims 1-3 and
43-44 (see page 5, paragraphs, 0093-0100) and an amino organomodified silicone compounds
(aminosilicone) (see page 17, paragraph, 0337), wherein the polymers are presented in the
composition in the amounts of 0.01 to 10% and 0.1 to 5% as claimed in claims 56-57 (see page
5, paragraph, 0104), wherein the composition further, comprises oxidation bases such as para-

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phenylenediamines, double bases, para-aminophenols and heterocyclic bases in the claimed amounts as claimed in claims 60-69 (see pages 6-8, paragraphs, 0108-0155), couplers such as meta-phenylenediamines in the claimed amounts as claimed in claims 70-72 (see page 8, paragraphs, 0156-0158), acid addition salts such as hydrochlorides and sulfates as claimed in claims 73-74 (see page 8, paragraph, 0159), direct dyes as claimed in claim 75 (see page 8, paragraph, 0160), amphoteric polymers in the claimed amounts as claimed in claims 76-82 (see page 12, paragraphs, 0237-0240), surfactants in the claimed amounts as claimed in claims 83-86 (see page 16, paragraph, 0317 and page 17, paragraph, 0331), cellulose thickener in the claimed amount as claimed in claims 87-89 (see page 17, paragraphs 0332-0333), reducing agent in the claimed amount as claimed in claim 90 (see page 17, paragraph, 0338) and oxidizing agents such as aqueous hydrogen peroxide as claimed in claims 91-94 (see page 18, paragraph, 0341) and wherein the composition has a pH in the claimed range as claimed in claim 95 (see page 18, paragraph, 0343). Cottard et al. (US' 515 A1) also teaches a multi-compartment kit and process for dyeing keratin fibers similar to those claimed in claims 96-102 (see page 18, paragraphs, 0349-0359 and page 23, paragraphs, 78-83).

The instant claims differ from the reference by reciting the weight ratio between aminosilicone to associative polymer to be equal or greater than 1.

However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to formulate a dyeing composition having the claimed weight ratio between aminosilicone compounds and associative polymers because the reference clearly teaches and disclose a composition comprising an effective quantity of organomodified silicone (aminosilicone) (see page 17, paragraph, 0337) and associative polymers such as cationic

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polymers in the claimed amounts (see page 5, paragraph, 0104), and, thus, the skilled person in the art would be modified to optimize the ratio between these dyeing ingredients in the composition in order to get the maximum effective amounts and would expect such a composition to have similar properties to those claimed, absent unexpected results.

Further, applicants have not shown on record the criticality of the claimed ratio in the claimed composition.

4 Claims 4-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cottard et al. (US 2001/0023515 A1) in view of Legrand et al. (US 2003/0140429 A1).

The disclosure of Cottard et al. (US' 515 A1) as described above, does not teach or disclose aminosilicone polymers chosen from aminosilicones of the claimed formulae (I), (II) and (III) as claimed.

However, Cottard et al. (US' 515 A1) suggests the use of organomodified silicone compounds as one of the agents that are already known for oxidation coloration (see page 17, paragraph, 0337).

Legrand et al. (US' 429 A1) in analogous art of hair dyeing formulation, teaches a composition comprising aminosilicone polymers having a formulae (I) and (II) which are similar to the claimed formulae (I), (II) and (III) as claimed in claims 4-22 (see page 2, formulae (I) and (II) and paragraphs, 0022-0034) and wherein the aminosilicone polymers are presented in percentage amounts that overlapped with the claimed percentage amounts as claimed in claims 23-24 (see page 3, paragraph 0053).

Therefore, in view of the teaching of the secondary reference, one having ordinary skill in the art at the time the invention was made would be motivated to modify the composition of

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Cottard et al. (US' 515 A1) by incorporating the aminosilicone polymers as taught by Legrand et al. (US' 429 A1) to make such a composition with a reasonable expectation of success. Such a modification would be obvious because Cottard et al. as a primary reference suggests the use of modified silicone polymers in the dyeing composition. Legrand et al. (US' 429 A1) as a secondary reference clearly teaches and discloses the claimed aminosilicone polymers, and, thus, a person of the ordinary skill in the art would be motivated to incorporate the aminosilicone polymers as taught by Legrand et al. in the composition of Cottard et al. with a reasonable expectation of success for improving the performance of the dyeing composition and the condition of the fibers as well, and would expect such a composition to have similar properties to those claimed, absent unexpected results.

With respect to claims 20-22, it would have been obvious to one having ordinary skill in the art at the time the invention was made to optimize the viscosity of the aminosilicone polymers in the dyeing composition to arrive at the claimed invention because Legrand et al. clearly teaches aminosilicone polymers having chemical structures similar to those claimed, and, thus, a person of the ordinary skill in the art would expect such polymers to have similar properties such as viscosity and would expect such a composition as a whole to have similar properties to those claimed, absent unexpected results.

5 Claims 45-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cottard et al. (US 2001/0023515 A1) in view of Laurent et al. (US 2002/0046431 A1).

The disclosure of Cottard et al. (US' 515 A1) as described above, does not teach or disclose cationic associative polyurethanes polymers of the claimed formulae (IA), (VII), (VIII), (X) and (IX) as claimed.

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However, Cottard et al. (US' 515 A1) suggests the use of cationic substantive polymers of homo-and-co-polymers derived from at least one monomer chosen from acrylic ester, methacrylic esters and amides in the oxidation coloration (see pages 8-9, paragraph, 0169).

Laurent et al. (US' 431 A1) in analogous art of hair dyeing formulation, teaches a composition comprising cationic polyurethane of a formula (Ia), which is similar to the claimed formula (IA) as claimed in claims 45-47 (see page 3, formula (Ia)).

Therefore, in view of the teaching of the secondary reference, one having ordinary skill in the art at the time the invention was made would be motivated to modify the composition of Cottard et al. (US' 515 A1) by incorporating the cationic polyurethane polymers as taught by Laurent et al. (US' 431 A1) to make such a composition with a reasonable expectation of success. Such a modification would be obvious because Cottard et al. as a primary reference suggests the use of cationic substantive polymers in the dyeing composition. Laurent et al. (US' 431 A1) as a secondary reference clearly teaches and discloses the claimed species of cationic polyurethane polymers, and, thus, a person of the ordinary skill in the art would be motivated to incorporate the cationic polyurethane polymers as taught by Laurent et al. in the composition of Cottard et al. with a reasonable expectation of success for improving the performance of the dyeing composition and would expect such a composition to have similar properties to those claimed, absent unexpected results.

Response to Applicant's Arguments

6 Applicant's arguments filed 6/27/2007 have been fully considered but they are not persuasive.

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With respect to applicant's arguments based on the rejection of the claims under 35 U.S.C. 103(a) as being unpatentable over Cottard et al. (US' 515 A)

The examiner respectfully disagrees with the arguments because the use of patents as references is not limited to what the patentees describe as their own inventions or to the problems with which they are concerned. They are part of the literature of the art, relevant for all they contain. "*In re Heck*, 699 F.2d 1331, 1332-33 216 USPQ 1038, 1039 (Fed. Cir. 1983) (quoting *In re Iemelson*, 397 F.2d 1006, 1009, 158 USPQ 275, 277 (CCPA 1968)). Further, a reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art, including non-preferred embodiments. *Merck & Co. v. Biocraft Laboratories*, 874 F.2d 804, 10 USPQ2d 1843 (Fed.Cir.), *cert. denied*, 493 U.S. 975 (1989). In this case Cottard et al. (US' 515 A1) teaches a dyeing composition comprising oxidation dyes (see page 5, paragraph, 0105), cationic thickening polymers comprising at least one fatty chain chosen from quaternized cellulose modified by groups comprising at least one fatty chain, quaternized hydroxyethylcellulose modified by at least one group comprising at least one fatty chain and wherein the thickener polymers are presented in the amount of 0.01 to 10 % and 0.1 to 5% (see page 5, paragraphs, 0093-0104). Cottard et al. also suggests the use of effective quantities of other agents that are already known for oxidation coloration and organomodified silicones are among these agents (see page 17, paragraph, 0337). Therefore, there is a clear suggestion and sufficient motivation to one having ordinary skill in the art to be motivated to optimize the weight ratio of the aminosilicone to the cationic associative polymers to arrive at the claimed invention.

Further, as the optimization of results, a patent will not be granted based upon the optimization of result effective variable when the optimization is obtained through routine experimentation unless there is a showing of unexpected results which properly rebuts the prima facie case of obviousness, see *In re Boesch*, 617 F.2d 272, 276, 205 USPQ 215, 219 (CCPA 1980). See also *In re Woodruff*, 919 F. 2d 1575, 1578, 16 USPQ2d 1934, 1936-37 (Fed. Cir. 1990), and *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955). In this case applicant has not shown on record the criticality of the claimed ratio in the claimed composition.

7 With respect to the rejection of claims under 35 U.S.C. 103(a) as being unpatentable over Cottard et al. (US' 515 A1) in view of Laurent et al. (US' 431 A1), Applicant argues that the examiner has failed to show that Cottard et al. teaches or suggests all the limitations of the base independent claims.

The examiner respectfully disagrees with the above arguments for the same reasons mentioned above.

With respect to the applicant's arguments based on the unexpected results that provided in the declaration filed on 6/27/2007, the examiner's position is that the declaration is not commensurate in the scope with the teachings of the prior art composition because the comparative data in the declaration excludes hydroxyethylcellulose quaternized polymer from the composition of the prior art (Comparative B) and wherein such polymer is suggested and taught by the Cottard et al. (515 A1) as prior art used in the rejection (see page 5, paragraph, 0100).

The examiner again advises applicants to provide a data or showing to demonstrate that the claimed composition provided unexpected results over the composition of the closest prior

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art of record (the provided data or showing may based on the criticality of weight ratio of aminosilicone to associative polymers or based on the combination of cationic associate polymers and cationic polyurethanes of the recited claims).

Conclusion

8 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eisa B. Elhilo whose telephone number is (571) 272-1315. The examiner can normally be reached on M - F (8:00 -5:30) with alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Eisa Elhilo/
Primary Examiner, A.U. 1751

June 28, 2007